

# NASA TECH BRIEF



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## Hydrogen Safety Manual

A Hydrogen Safety Manual has been published which details the technical knowledge and long experience of the NASA Lewis Research Center in the handling and use of hydrogen. NASA and the Lewis Research Center pioneered in liquid hydrogen technology, and continue in the research, development, and use of hydrogen as a rocket fuel and propellant. Experience over many years ranges from basic laboratory research to bulk quantity operational use.

The Hydrogen Safety Manual covers the characteristics and nature of hydrogen, design principles for hydrogen systems, protection of personnel and equipment, and operating and emergency procedures. It is an operating manual which sets forth acceptable standards and practices for minimum safety requirements at the NASA Lewis Research Center. The information in the Hydrogen Safety Manual is believed to be useful for establishing minimum safety requirements for other hydrogen installations.

### Notes:

1. The Hydrogen Safety Manual supplements NASA Special Publication 5032, "Handling Hazardous Materials," Chapter 1, "Liquid Hydrogen," by providing considerably more detail and particular specifications.

2. NASA Special Publication 5032, "Handling Hazardous Materials," is a report on the handling of both liquid hydrogen and other hazardous materials utilized as aerospace fuels and oxidizers. Copies may be obtained from the U.S. Government Printing Office, price: \$0.45.
3. The Hydrogen Safety Manual, NASA Technical Memorandum X-52454, by the NASA Lewis Research Center Advisory Panel on Experimental Fluids and Gases, 1968, is available from the Clearinghouse for Federal Scientific and Technical Information, Springfield, Virginia 22151.
4. Single copies of the Hydrogen Safety Manual, NASA Technical Memorandum X-52454, may also be requested from:

Technology Utilization Officer  
Lewis Research Center  
21000 Brookpark Road  
Cleveland, Ohio 44135  
Reference: B68-10323

### Patent status:

No patent action is contemplated by NASA.

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